



Digidim

a boardroom presentation...

an intimate dinner at your favourite restaurant...

checking-in at your hotel's reception desk...

an office meeting...

All these activities require different lighting levels to create an appropriate mood. Helvar's DIGIDIM range gives you the products to fulfil any lighting control requirement.

From a single office to a cruise liner; a living room or a hotel reception; DIGIDIM products are - lighting the way forward.

Digidim Key Features

- Dimmers and output units to suit any load type
- Flexible design with DIN-rail mounted modules
- No special cables required
- Cost-effective with easy installation
- Control panels available in a wide range of finishes
- Infrared receiver on all control panels
- Control panels fit into a standard UK and most European backboxes
- Customised control panels and finishes available to order
- All dimmers are voltage stabilised
- Thermal cut-out protection on all dimmers in the event of overheating
- User-friendly software package



System Guidelines

Standalone Digidim System

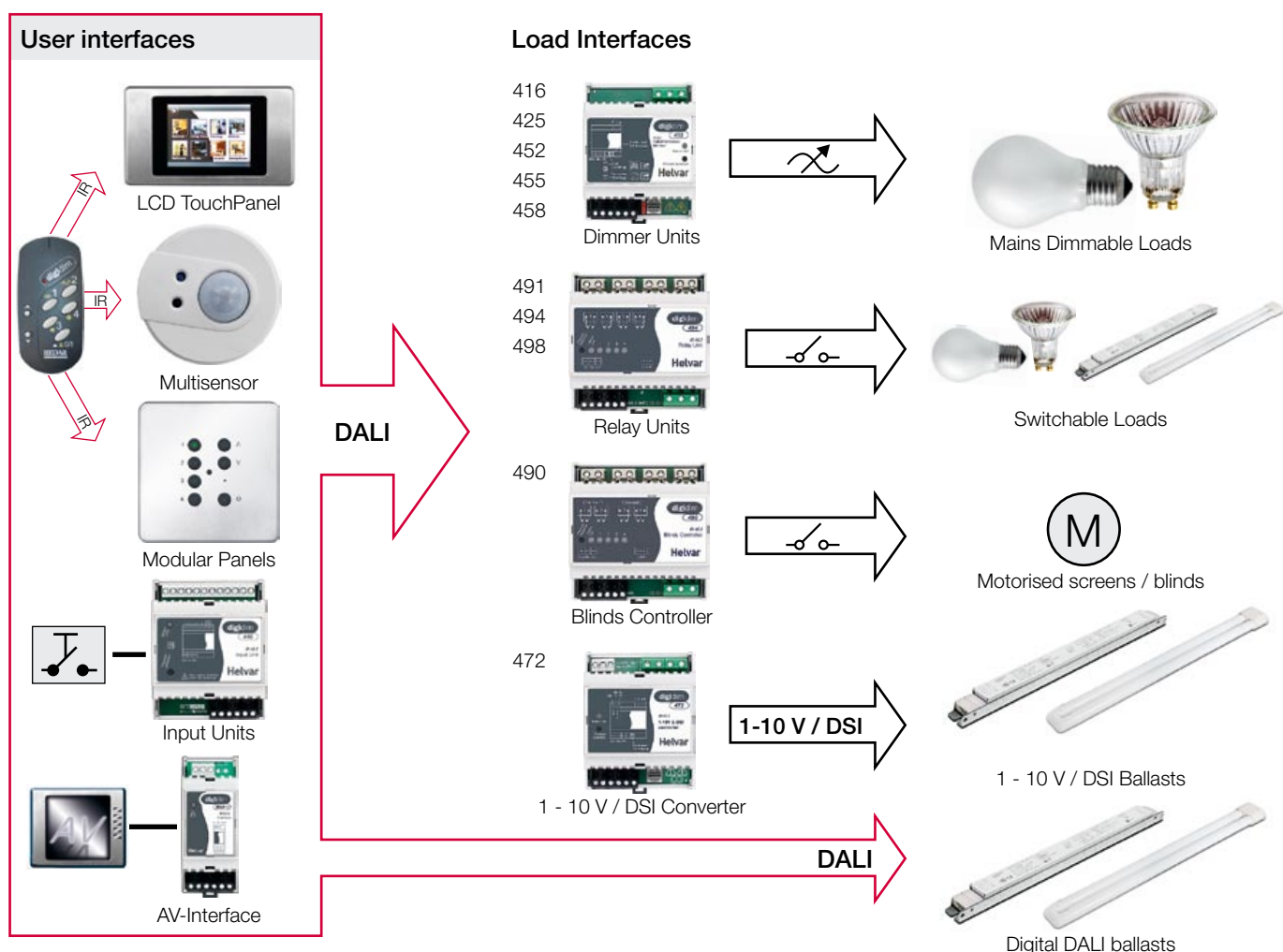
- Up to 63 addresses per system
- Up to 250 mA current per system
- 10 mA / panel
- 15 mA / multi-sensor
- 2 mA required per load interface
- Each system may be configured with up to 16 groups
- Every load within a Digidim system may be programmed with up to 16 scene settings

Digidim Router System

- A single Digidim router can support up to 128 DALI devices
- Up to 100 Digidim routers may be networked together
- 16,000 groups
- Up to 12,800 DALI devices per system
- Each load interface has 128 scenes
- Integral 250 mA DALI power supply for each DALI network
- 10/100 Mbit/s Ethernet connection using the Internet (TCP/IP) protocol
- OPC link to BMS

Cable Specification

- DALI connections of up to 300 m can be made with any 2 wire 0.5 - 1.5 mm² mains rated cable
- NOTE: The Digidim panels must be earthed as shown in the installation instructions
- (In rare instances where the environment may be electrically noisy, due to adjacent circuits carrying high switching currents, we recommend a 2 wire twisted pair screened and sheathed cable)



Standalone Digidim System

Using modules from the DIGIDIM range, a system can be designed to enhance any environment, increasing comfort and energy saving. Control panels allow manual selection of pre-programmed scenes for different office tasks. Using a multi-sensor a constant light level can be maintained, and, when combined with presence detection, the office becomes more energy-efficient.

Building up Digidim System

Select load interface required

- Dimmers
- Relay units
- Luminaires equipped with DALI ballasts

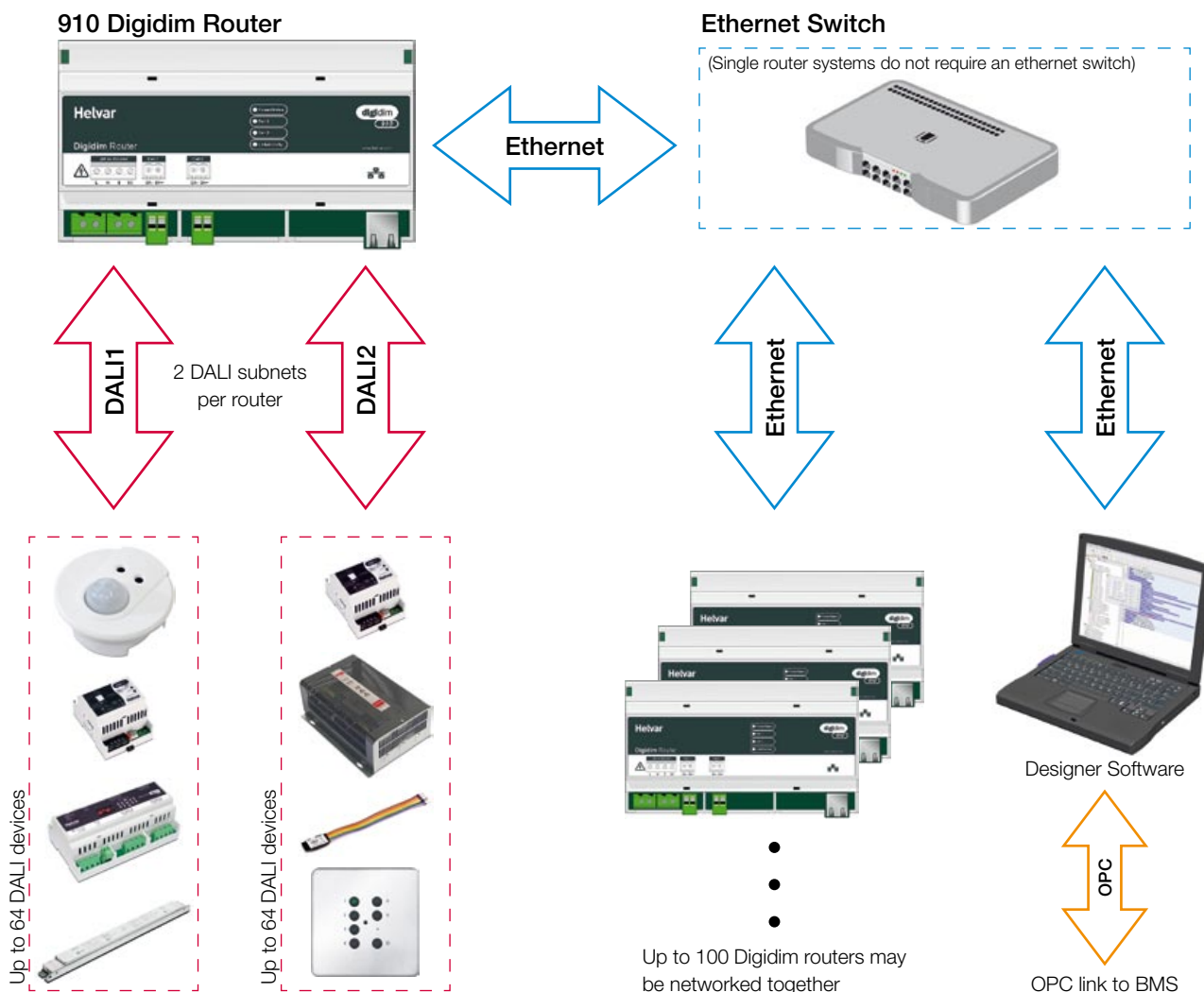
Add DALI power supply, if needed

Select desired user interfaces

- LCD TouchPanel, Modular control panels
- Any latching or momentary switches with input unit

Energy saving features with Multisensor

- PIR
- Constant light



Digidim Router System

To create larger systems, routers can be networked together by using standard Ethernet switches. This allows the system expansion by linking multiple routers and is also used for system programming and monitoring.

The extent of the lighting management system is defined by a workgroup. A workgroup is a collection of routers connected by a high speed ethernet backbone.

Building up Digidim Router System

Select load interface required

- Dimmers
- Relay units
- Luminaires equipped with DALI ballasts

Select desired user interfaces

- Modular control panels
- Any latching or momentary switches with input unit

Energy saving features with Multisensor

- PIR
- Constant light

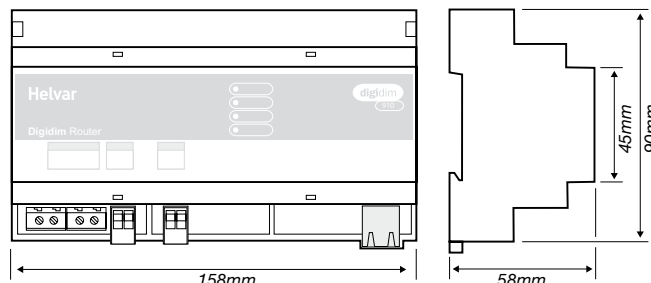
Link DALI networks together with Ethernet link provided by Digidim Router

Note: LCD TouchPanel (924x) is not compatible with DIGIDIM Router (910)

Digidim Router (910)

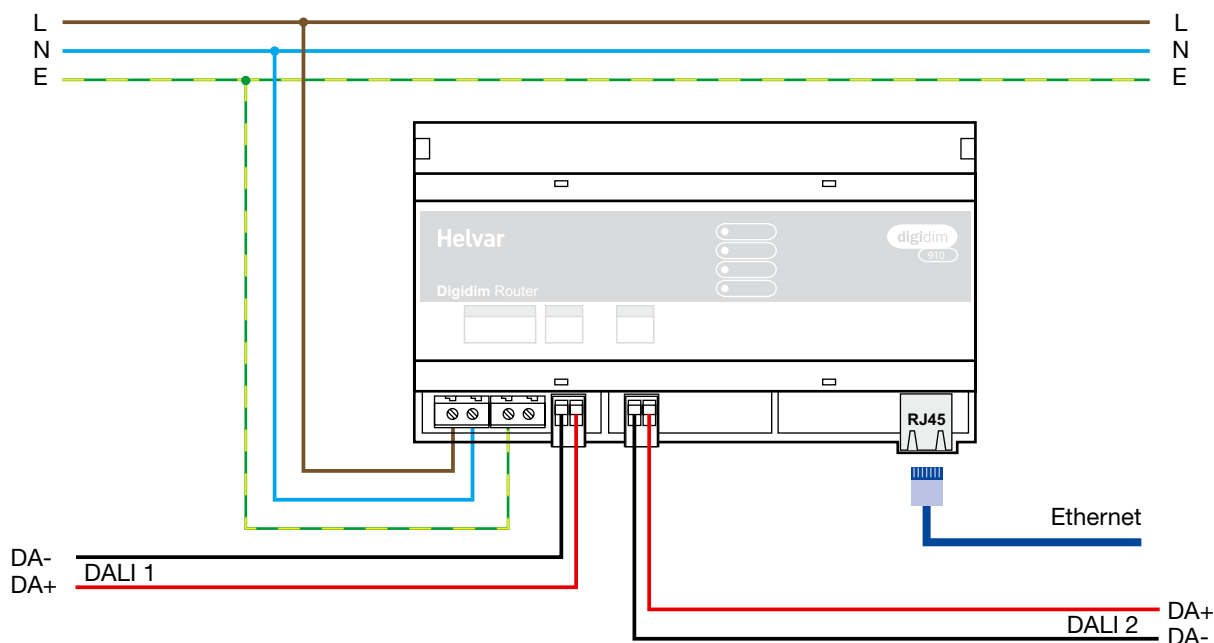


1



DIN-rail case 9U-wide, weight 265 g

Connections



Introduction

The DIGIDIM Router uses standard Ethernet communication to combine multiple DALI networks. The router features two DALI universes allowing for a total of 128 control devices and load interfaces.

Key Features

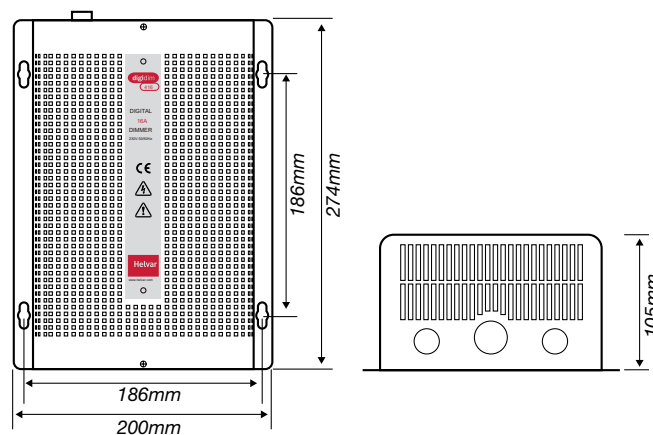
- Two DALI subnets with 250 mA power supply
- Distributed intelligence
- Ethernet port for network backbone
- OPC interface to link to Building Management Systems

Technical Data

Mains Supply:	85-264 VAC, 45 Hz-65 Hz
External MCB protection:	3 A
DALI power source:	2 X 250 mA
Ambient Temp:	0...40°C
Relative Humidity:	90% max, non-condensing
Storage temperature:	-10...70°C
IP Rating:	30 (when installed in cabinet)

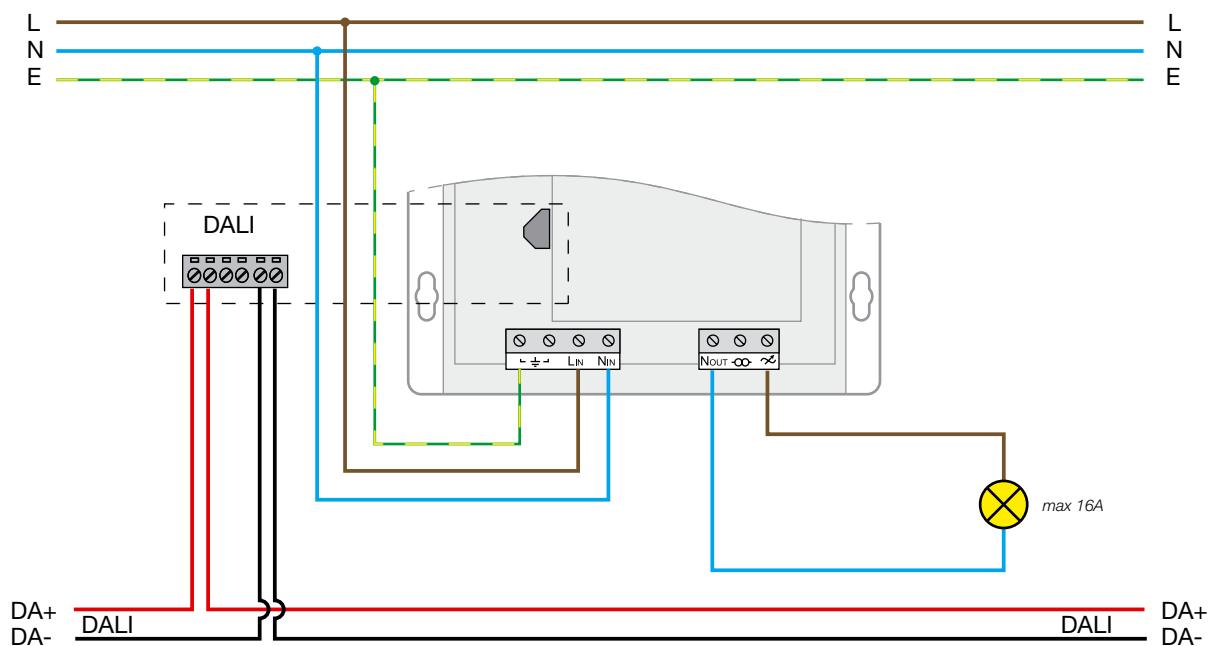
Product Order Code: 910

16A Dimmer (416)



Wall mounted, weight 2.2 kg

Connections



Introduction

Single channel 16 Amp thyristor dimmer (leading edge) for use in a DIGIDIM lighting control system. Suitable for tungsten, halogen, wire-wound (inductive) fed low voltage tungsten or neon loads. The dimmer is a wall-mounted unit that can control a maximum load of 16 A.

Key Features

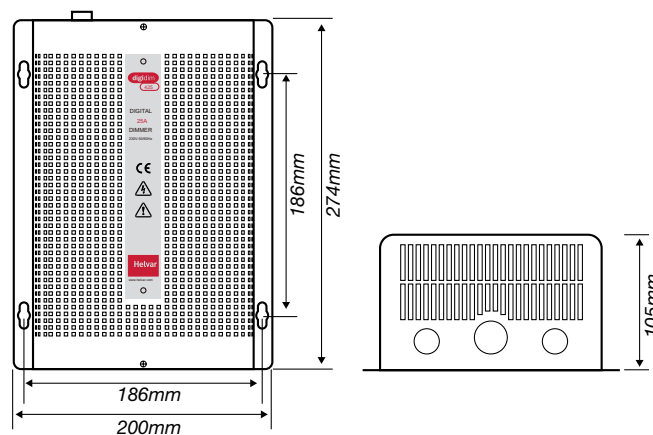
- Stabilised output
- Selectable, integral, 250 mA DALI power supply.
- Over temperature protection.

Technical Data

Mains Supply:	220-240 VAC, 50-60 Hz
External MCB protection:	16 A
Maximum load:	16 A
Heat Dissipation:	39 W with maximum load (resistive)
DALI Supply Output:	250 mA (Selectable, Default ON)
DALI Consumption:	2 mA
Ambient Temperature:	0...35°C
Relative Humidity:	90% max, non-condensing
Storage Temp:	-10°C...+70°C
IP rating	30

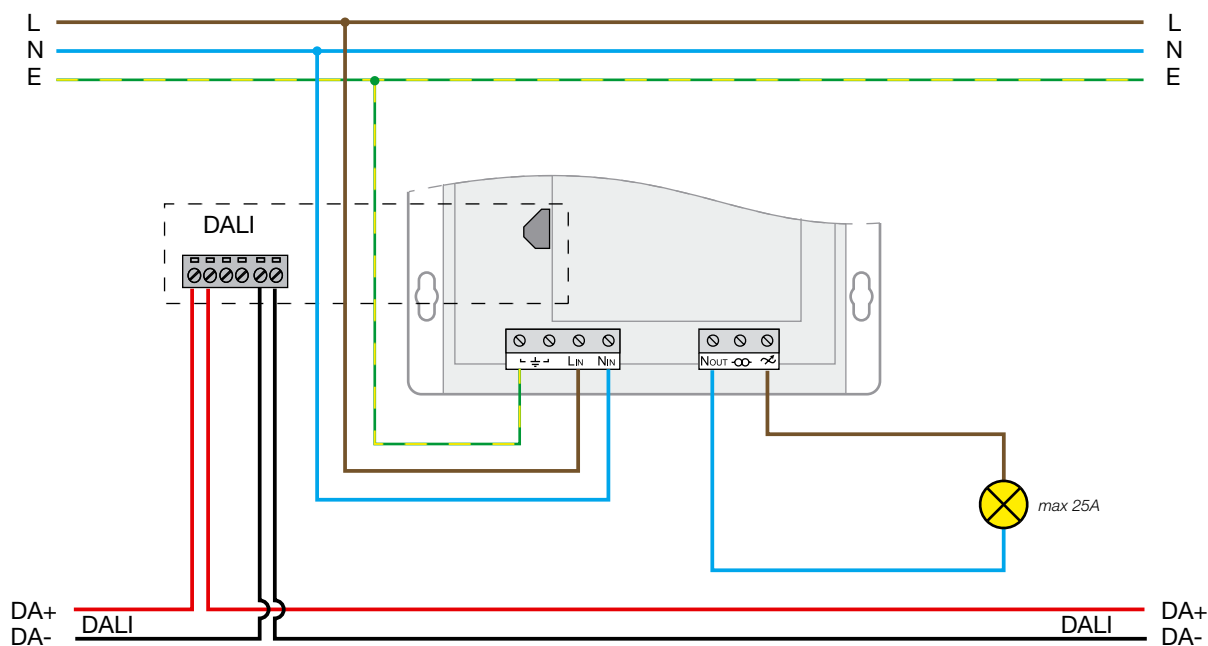
Product Order Code: 416

25A Dimmer (425)



Wall mounted, weight 2.8 kg

Connections



Introduction

Single channel 25 Amp thyristor dimmer (leading edge) for use in a DIGIDIM lighting control system. Suitable for tungsten, halogen, wire-wound (inductive) fed low voltage tungsten or neon loads. The dimmer is a wall-mounted unit that can control a maximum load of 25 A.

Key Features

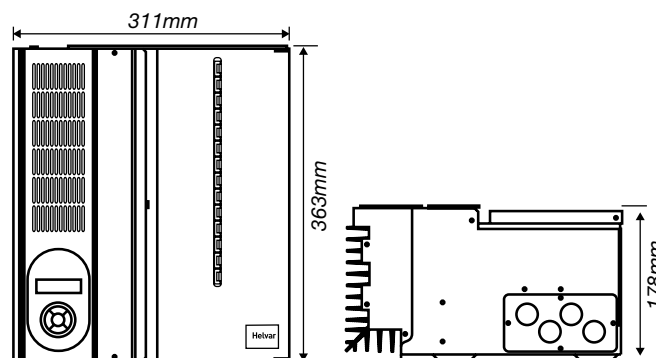
- Stabilised output
- Selectable, integral, 250 mA DALI power supply.
- Over temperature protection.

Technical Data

Mains Supply:	220-240 VAC, 50-60 Hz
External MCB protection:	25 A
Maximum load:	25 A
Heat Dissipation:	64 W with maximum load (resistive)
DALI Supply Output:	250 mA (Selectable, Default ON)
DALI Consumption:	2 mA
Ambient Temperature:	0...35°C
Relative Humidity:	90% max, non-condensing
Storage Temp:	-10°C...+70°C
IP rating	30

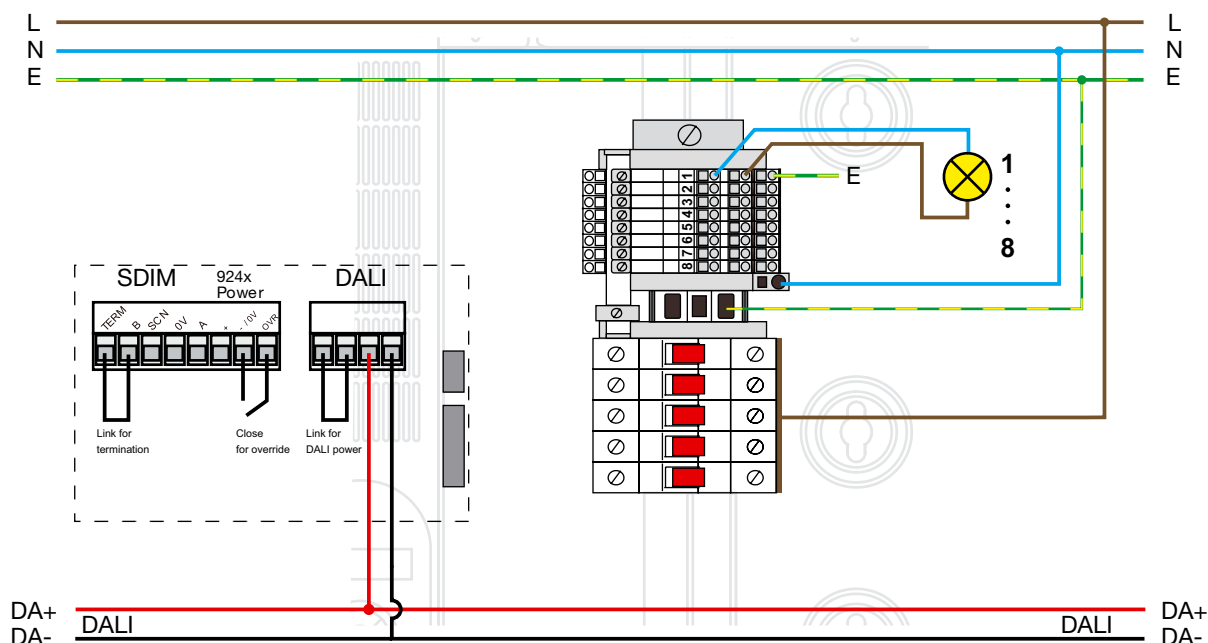
Product Order Code: 425

8 x 5A, Thyristor dimmer (458)



Wall mounted, weight 11.1 Kg

Connections



Introduction

Wall mounted 8-channel thyristor dimmer rated at 10A per channel, with a total dimmer current capacity of 40A. Dimming of leading-edge loads. Option to convert 4 channels to HF-ballast control. Compatible with DALI and S-DIM interfaces. LCD display with switches for basic configuration and control.

Key Features

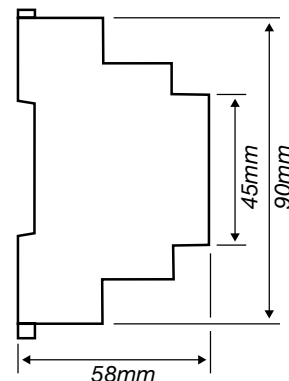
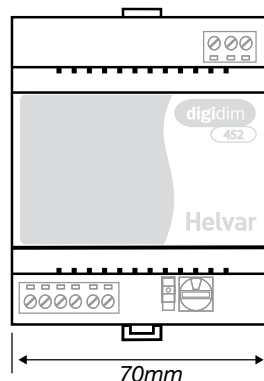
- LCD display screen with navigation switches
- Power supply for the LCD TouchPanel (924x)
- Build in Digidim power supply
- Provided with by-pass connectors

Technical Data

Supply Voltage	85-264 VAC, 45-65 Hz
Protection:	4 x 10 A MCB, 4 A MCB for control board
Total current capacity:	40 A
Heat Dissipation:	72 W with maximum load (resistive)
DALI Supply Output:	250 mA (Selectable, Default OFF)
TouchPanel Supply:	250 mA
DALI Consumption:	2 mA
Ambient Temperature:	0...40°C
Relative Humidity:	90% max, non-condensing
Storage Temperature:	-10°C...+70°C
IP rating	20

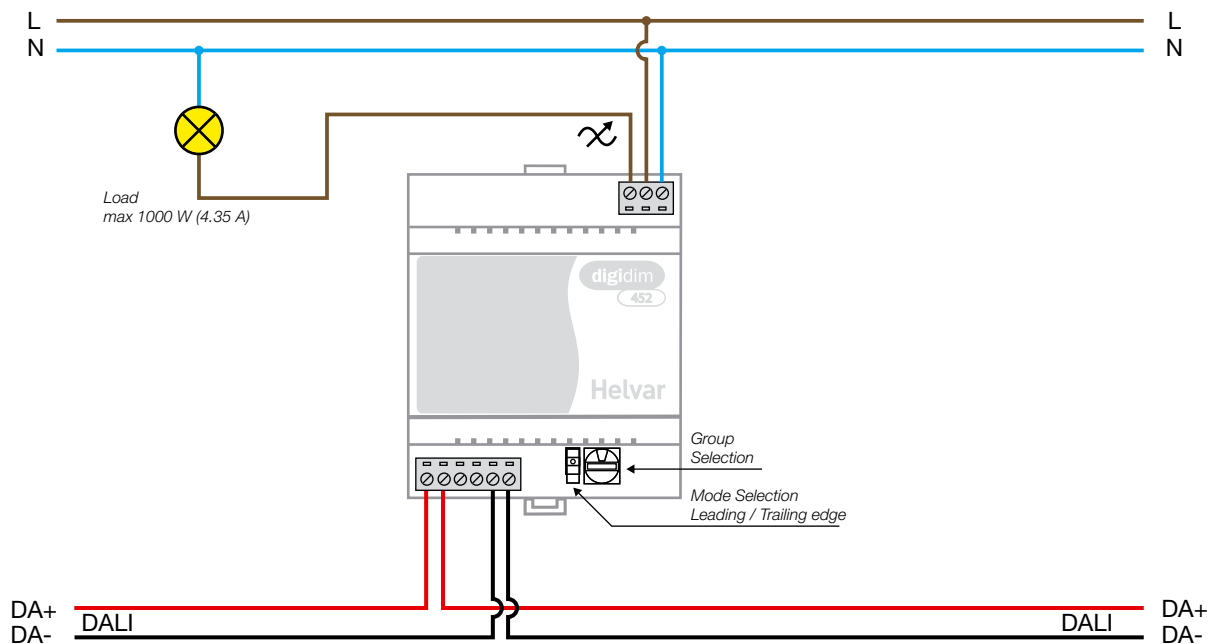
Product Order Code: 458

1000W, Universal dimmer (452)



DIN-rail case 4U-wide, weight 180 g

Connections



Introduction

Single channel universal dimmer suitable for leading or trailing-edge loads. The dimmer is a DIN-rail mounted unit that can control a maximum load of 1000 W. Out of the box operation. No programming required when using DIGIDIM slider, rotary, or push button panels.

Key Features

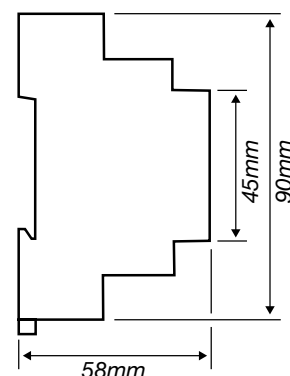
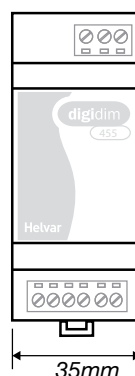
- Status LED
- Switch for load selection
- Switch for manual DALI group selection
- Over current, power and temperature protection

Technical Data

Supply Voltage	90-26 4VAC, 48-62 Hz
External MCB protection	6 A
Maximum Load	1000 W
Heat Dissipation:	12 W with maximum load (resistive)
DALI Consumption:	2 mA
Ambient Temperature:	0...40°C
Relative Humidity:	90% max, non-condensing
Storage Temperature:	-10°C...+70°C
IP rating	30

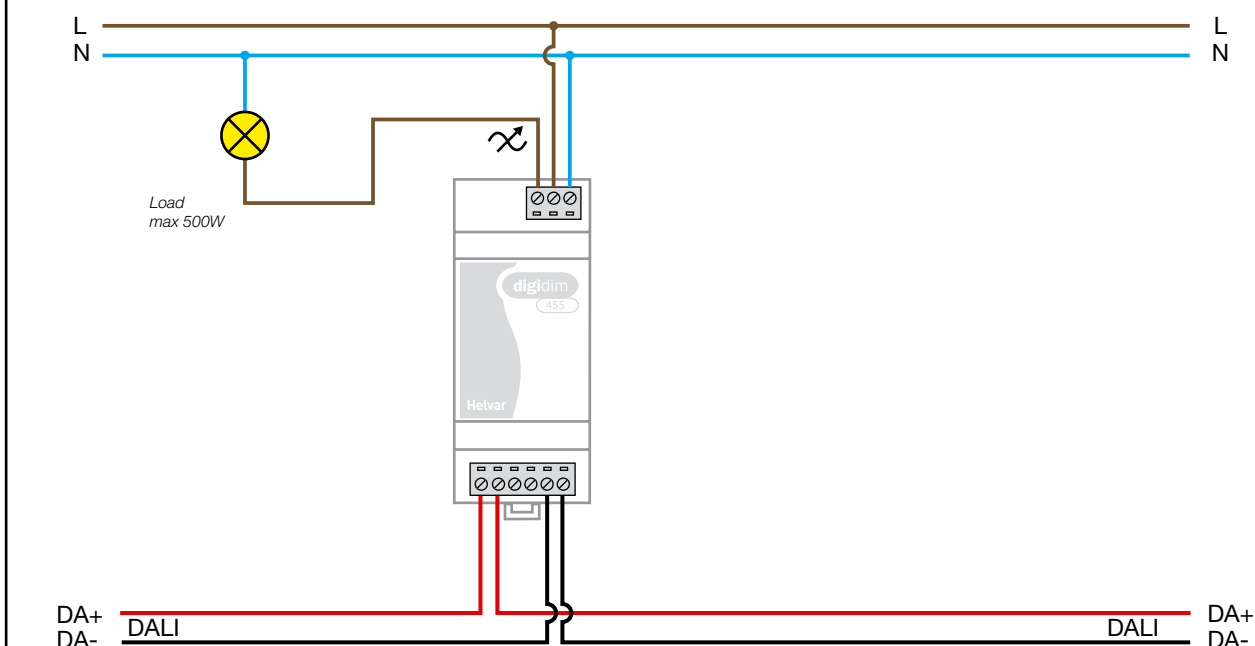
Product Order Code: 452

500W, Thyristor Dimmer (455)



DIN-rail case 2U-wide, weight 110 g

Connections



Introduction

Single channel thyristor dimmer suitable for leading edge loads. The dimmer is a DIN-rail mounted unit that can control a maximum load of 500 W. Out of the box operation. No programming required when using DIGIDIM slider, rotary, or push button panels.

Key Features

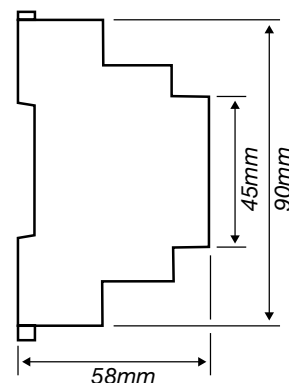
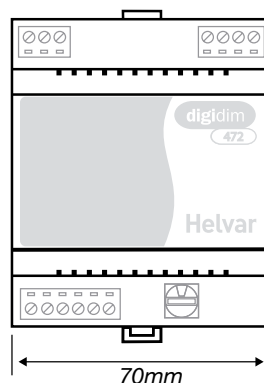
- Status LED
- Stabilised output
- Over current and over temperature protection.

Technical Data

Supply Voltage	220-240 VAC, 50-60 Hz
External MCB protection	4 A
Maximum Load	500 W
Heat Dissipation:	3.5 W with maximum load (resistive)
DALI Consumption:	2 mA
Ambient Temperature:	0...40°C
Relative Humidity:	90% max, non-condensing
Storage Temperature:	-10°C...+70°C
IP rating	30

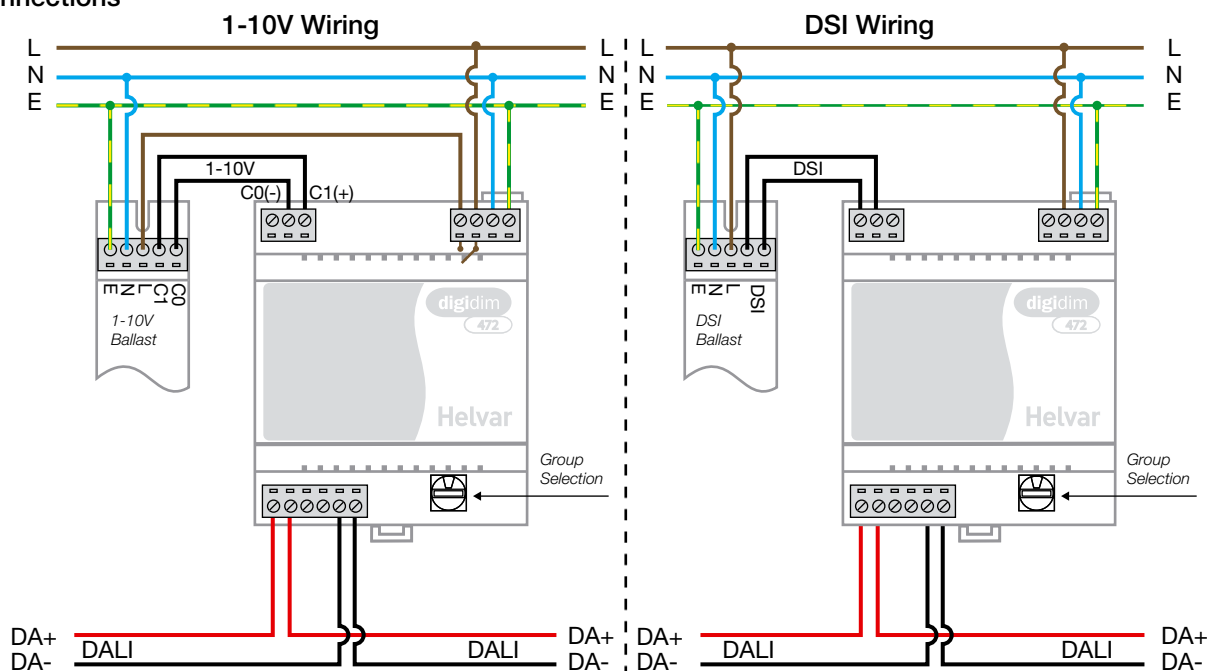
Product Order Code: 455

1-10V / DSI Converter (472)



DIN-rail case 4U-wide, weight 140 g

Connections



Introduction

DALI to 1-10 V / DSI converter suitable for controlling electronic ballasts. Switch a maximum of 15 Helvar electronic ballasts sc / CHFC3. The analogue 1-10 V / digital DSI signal can control up to 50 electronic ballasts.

Key Features

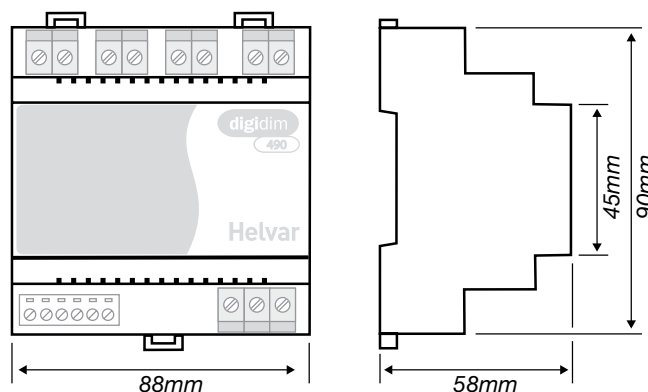
- Status LED
- Switch for manual DALI group selection
- 1-10 V & DSI output for 50 ballasts

Technical Data

Supply Voltage	85-264 VAC, 45-65 Hz
External MCB protection:	10 A Type C
Mains Output:	10 A resistive
Load:	15 x sc / CHFC3 ballasts.
DALI Consumption:	2 mA
Ambient Temperature:	0...40°C
Relative Humidity:	90% max, non-condensing
Storage Temperature:	-10°C...+70°C
IP rating	30

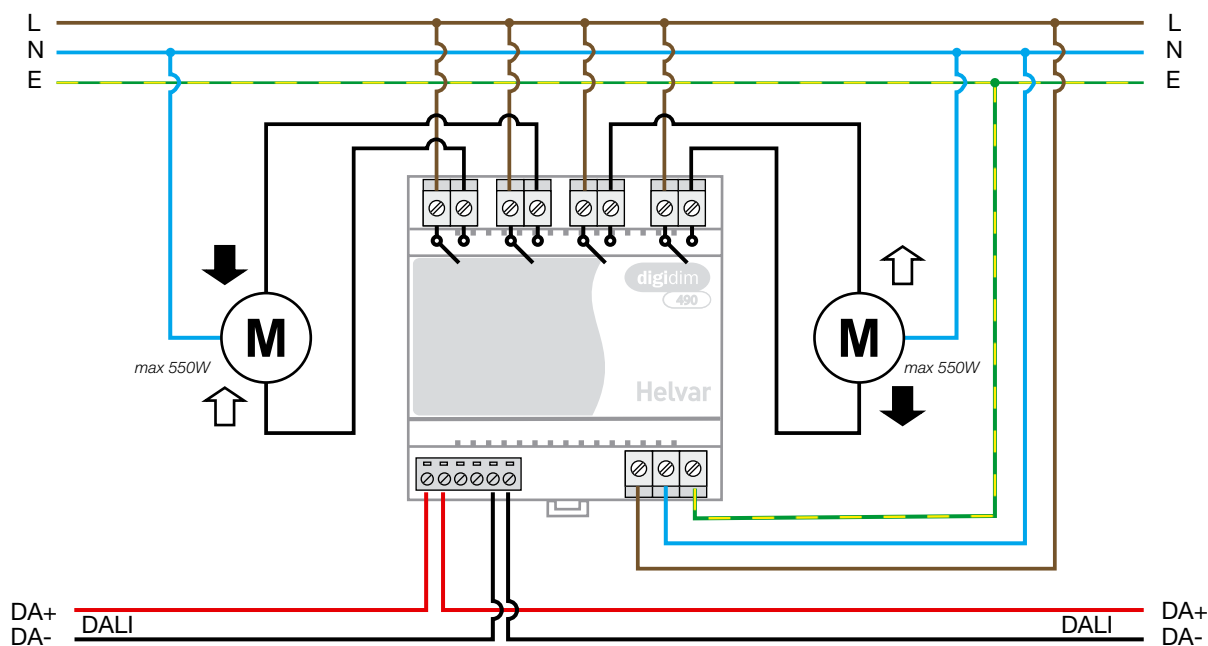
Product Order Code: 472

2 channel Blinds Controller (490)



DIN-rail case 5U-wide, weight 300 g

Connections



Introduction

Two channel blinds controller designed for control of blinds and curtains. Two independent control channels each with two single pole, volt free contacts for switching up/down or power / direction motors. Programmable "blind travel time".

Key Features

- Status LED
- "Break before Make" operation to prevent motor damage.
- Isolated relays, normally open and volt free.

Technical Data

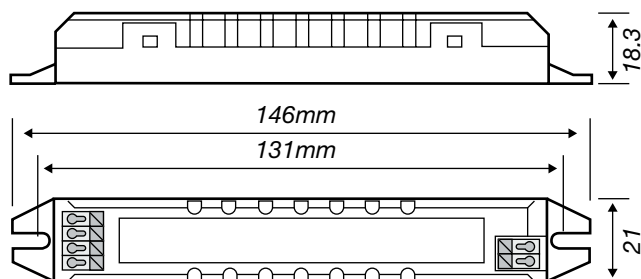
Supply Voltage	220-240 VAC, 50-60 Hz
External MCB protection:	6 A
Maximum Load:	550 W / channel
DALI Consumption:	2 mA
Ambient Temperature:	0...40°C
Relative Humidity:	90% max, non-condensing
Storage Temperature:	-10°C...+70°C
IP rating	30

Product Order Code: 490

1 channel Relay Unit (491)

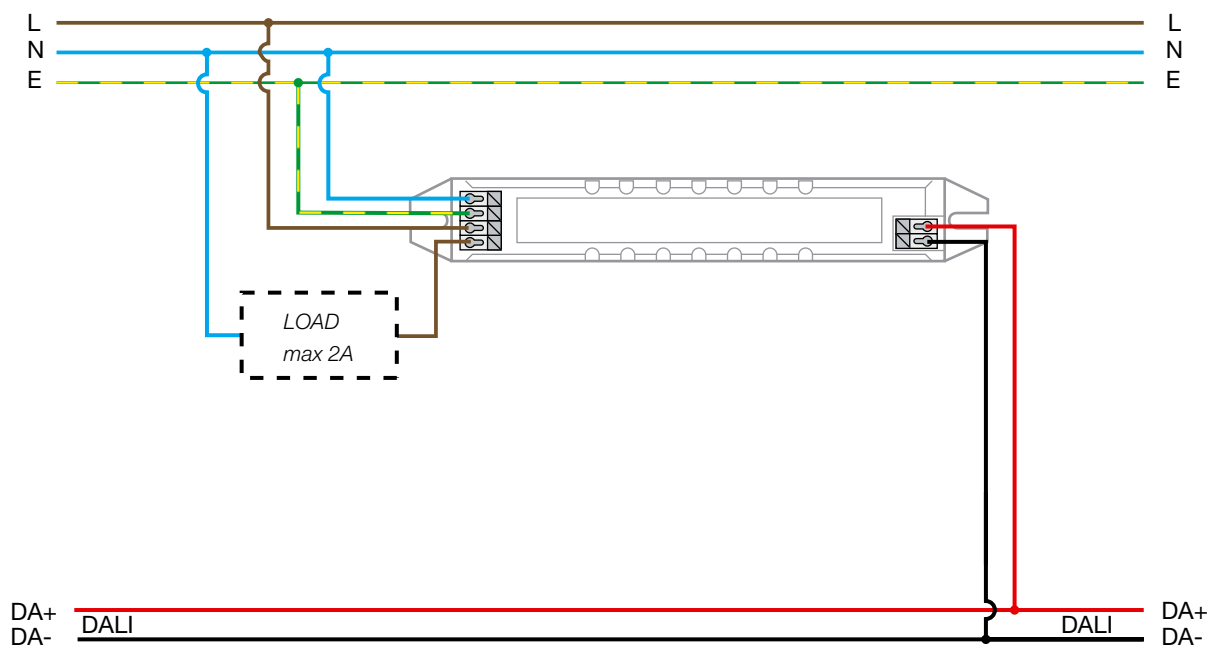


1



Luminaire mount, weight 35 g

Connections



Introduction

Single channel relay unit for integration in luminaires or electrical cabinets. Designed to allow control of switched loads.

Key Features

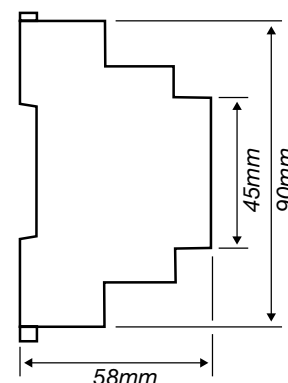
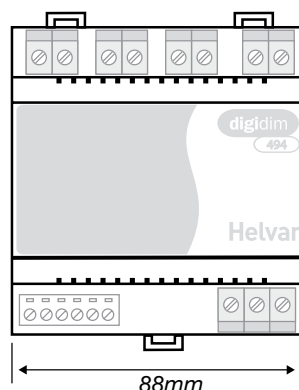
- Switches up to 3 Helvar EL-s / TCs ballasts

Technical Data

Supply Voltage:	200-265 V, 45-65 Hz
External MCB protection:	3 A
Power Consumption:	1.3 W (max)
Relay load:	2 A (resistive), 3 Helvar EL-s / TCs ballasts
DALI Consumption:	2 mA
Ambient Temperature:	0...50°C
Relative Humidity:	90% max, non-condensing
Storage Temperature:	-10°C...+70°C
IP rating	30

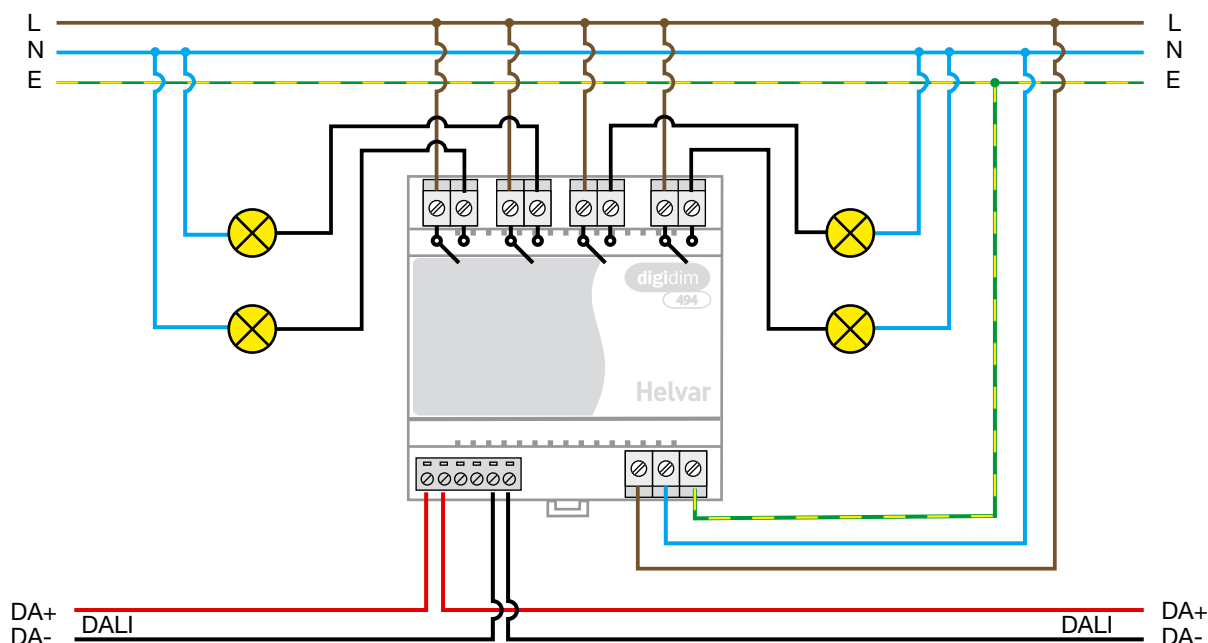
Product Order Code: 491

4 channel Relay Unit (494)



DIN-rail case 5U-wide, weight 300 g

Connections



Introduction

Four channel DALI Relay Unit, designed to allow control of non-dimmable loads. The relay unit is a DIN-rail mounted unit that has four individually programmable relays. The relays are 'normally open', volt free and can switch up to 10 A resistive loads.

Key Features

- Status LED
- Isolated relays, normally open and volt free.
- Manual override

Technical Data

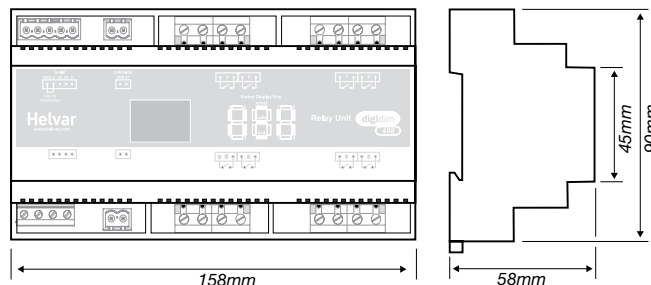
Supply Voltage	220-240 VAC, 50-60 Hz
External MCB protection:	6 A
Relay loads:	10 A (resistive) 8 A (incandescent) 5 A (inductive) 15 pcs EL-s / TCs ballasts
DALI Consumption:	2 mA
Ambient Temperature:	0...40°C
Relative Humidity:	90% max, non-condensing
Storage Temperature:	-10°C...+70°C
IP rating	30

Product Order Code: 494

8 channel Relay Unit (498)

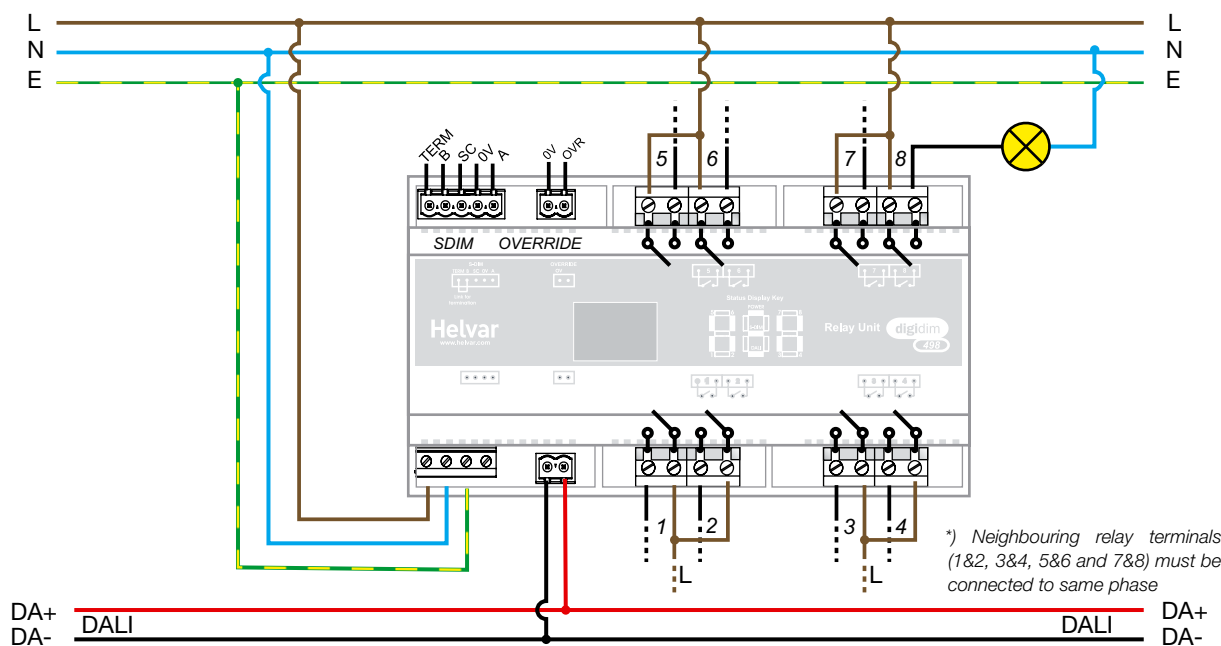


1



DIN-rail case 9U-wide, weight 400 g

Connections



Introduction

Eight channel Relay Unit, fitted with individually programmable high-inrush relays to allow control of non-dimmable loads. The relay unit is a DIN-rail mounted. The relays are 'normally open', volt free relays rated at 10 A per channel. The relay unit has a DALI and SDIM port.

Key Features

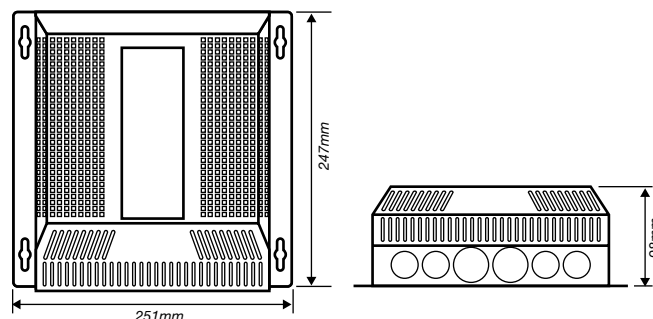
- LED display and control buttons
- High inrush specification relays
- Override input for external triggers

Technical Data

Mains Supply:	85-264 VAC, 45Hz-65 Hz
External MCB protection:	3 A
Relay loads:	10 A
DALI Consumption:	2 mA
Ambient Temperature:	0...40°C
Relative Humidity:	90% max, non-condensing
Storage Temperature:	-10°C...+70°C
IP rating	30

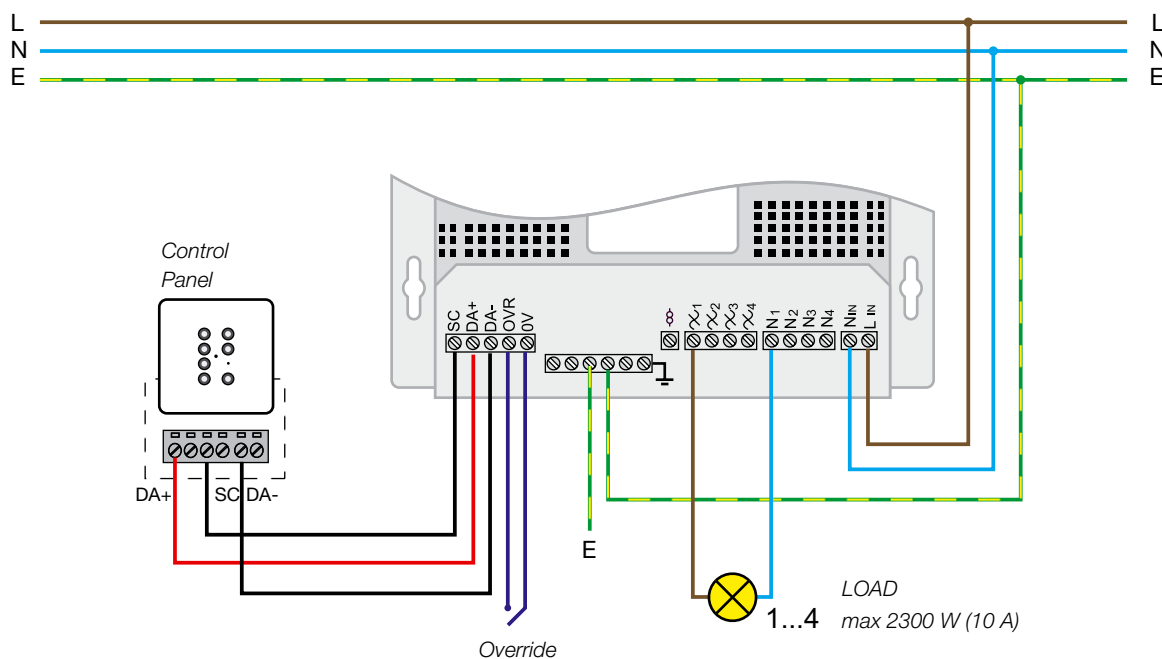
Product Order Code: 498

Digidim4 4 channel Lighting Control pack (804x)



Dimmer unit: Wall mounted, weight 2,95 kg

Connections



Introduction

DIGIDIM4 offers a stand-alone dimming system for out-of-box installation. It consists of a four circuit thyristor dimmer, a seven button pre-programmed control panel and an infrared hand held remote control. The dimmer has four independent channels with a total current dimming capacity of 10 A.

Key Features

- Out of the box operation
- All wiring uses standard twin and earth mains cable
- Easy manual configuration
- Override input

Technical Data

Mains Supply:	230 VAC, 50/60 Hz (Nom)
External MCB protection:	10 A
Maximum Load	2300 W (10 A)
Power consumption	12 W with maximum load (resistive)
Ambient Temperature:	0...40°C
Relative Humidity:	90% max, non-condensing
Storage Temperature:	-10°C...+70°C
IP rating	20

Product Order Code: 804x